

REMARKS

Claims 1-7 and 21-28 were pending. Claim 1 has been amended to further clarify the nature of the claimed invention. Accordingly, claims 1-7 and 21-28 remain pending subsequent entry of the present amendment.

In the present Office Action, claims 1-7 and 21-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 6,687,760 (hereinafter "Bracha"), in view of U.S. Patent No. 6,128,717 (hereinafter "Harrison"). As noted above, Applicant has amended claim 1 to further clarify the nature of the claimed invention. Applicant traverses at least some of the rejections above. Accordingly, Applicant requests reconsideration in view of the following comments.

In Applicant's previous response dated July 29, 2005, Applicant noted the distinct natures of the claimed invention vis-à-vis the cited art. For example, Applicant noted the claimed invention is generally directed to storage systems and entities which may be stored therein. In contrast, Bracha is directed to object oriented programming. While Applicant noted numerous distinctions, the examiner suggests in the present office action that various aspects of the Applicant's arguments do not in fact appear as features of the claims. Accordingly, the term "storage object" has been interpreted broadly by the examiner to include Bracha's object oriented object. As previously noted in Applicant's prior response, it is well known by those skilled in the art that an "object" in the object oriented sense of Bracha is, generally speaking, a memory resident instance of a data structure and operations defined by the object's class. In order to further clarify the nature of the claimed invention, Applicant has amended claim 1 to recite the features:

"receiving a request to access a storage object residing on a non-volatile storage device of the first storage environment;
receiving a storage object reference which corresponds to the storage object".

As seen from the amendment to claim 1, it is specified that the storage object is one which resides on a non-volatile storage device in the storage environment.

Accordingly, the nature of the storage object as recited is made clear and is readily distinguished from the object oriented “object” of Bracha. In view of both the amendment, and the extensive description which describes the storage system, it is believed that claim 1 is patentably distinct from the cited art, whether taken singly or in combination with one another. As each of dependent claims 2-7 include at least the features of claim 1, each of these claims are believed patentable for at least the above reasons.

In addition to the above, Applicant submits that claim 21 recites features neither taught nor suggested by the cited art. Claim 21 recites a system which includes:

“a storage management stack having a plurality of stack levels, wherein the stack levels include a lowest level identifying one or more storage devices of a first storage environment;
plug-in modules wherein each plug-in module interfaces with one of the stack levels to resolve a reference to a storage object and to pass the resolved reference to a next stack level, unless the resolved reference is an absolute reference to the storage object housed on one or more of the storage devices; and
a controller that selectively calls a number of the plug-in modules until the absolute reference is obtained.” (emphasis added).

Applicant submits at least the above features are neither taught nor suggested by the cited art. In the present office action (page 7), it is stated that “Harrison discloses . . . the controller that selectively calls a number of the plug-in modules (see fig. 1A, Harrison).” However, Harrison merely shows a figure of a hard disk drive with a controller, and states: “[g]enerally speaking, the interface connects to an embedded controller within the hard disk drive which receives and acts upon commands from the host, and returns status indications, adjunct to the primary function of recording and retrieving data blocks to and from internal storage disks.” (Harrison, col. 3, lines 39-44). Applicant submits that Harrison nowhere discloses nor suggests “plug-in modules wherein each plug-in module interfaces with one of the stack levels to resolve a reference to a storage object and to pass the resolved reference to a next stack level.” Neither does

Bracha disclose or suggest these features. Accordingly, Applicant submits not all of the features of claim 21 are disclosed or suggested by the cited art, and a prima facie case of obviousness is not established. Therefore, claim 21 is patentably distinct from the combined cited art.

Applicant submits the application is in condition for allowance. However, should the examiner believe issues remain that would prevent the present application from proceeding to allowance, the below signed representative requests a telephone call at (512) 853-8866 in order to facilitate a speedy resolution.

CONCLUSION


Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5760-17100/RDR.

Also enclosed herewith are the following items:

☒ Return Receipt Postcard

Respectfully submitted,



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